AEGIS EVO Series

Owner's manual

AEGIS EVO Series

((AE))

ACOUSTIC ENERGY

Downloaded from www.Manualslib.com manuals search engine

Introduction

Congratulations on choosing the Acoustic Energy AEGIS EVOLUTION Series — a range of powerful loudspeakers which feature metal diaphragm technology and are capable of outstanding performance. Please take a few moments to read this manual. The advice it contains will enable you to get the very best performance out of your Acoustic Energy loudspeakers.

The AEGIS EVOLUTION speakers utilise metal cone bass and mid-bass drive unit technology, proven in the AE Reference series. The ultra rigid ceramic layered alloy cones ensure pure piston action and also acts as a heat sink for the bonded voice coil. These features provide exceptional clarity, transparency, dynamics and power handling. The tweeters, or treble drivers, employ a high-quality silk dome unit, built on a metal chassis, integrating smoothly with the rest of the system. All drive units are fully magnetically shielded so that the speakers can be used in close proximity to a TV screen or monitor for AV applications. The AEGIS EVOLUTION loudspeakers use quality OFC internal wiring, which enhances detail and transparency, and may be bi –wired as desired.

Positioning

Experiment with the best placement in the room to achieve a full, yet clean bass response, a natural sounding mid range and a balanced spacious stereo image. Trust your judgement and ears. For best stereo imaging the speakers should be about as far apart as they are from the listening position. The speakers should be equally distant from the listener[s] and should not be too close to large items of furniture which may cause sound reflections. Ideally they should be about 1m from the side walls and about 0.7m from the wall behind. The spacing of the listening seat to the back wall may be quite critical for a smooth deep bass.

Aegis Evo One
The AEGIS EVO ONE is best heard with the tweeters at, or just above, ear height when the listener is seated. For serious listening the grilles are best removed when the greatest clarity results.

Rigid support is essential for the speaker to develop its full detail and dynamic performance. Good quality metal stands fitted with spikes, cones or other methods of firm mounting are recommended. Stand mounting, placed as recommended gives best stereo separation and depth.

If AEGIS EVO ONEs are shelf mounted, the support must be firm; cones, or felt pads are recommended beneath the cabinets to reduce vibration coupling to the support. Good quality wall brackets may be used, designed for speakers of this size and weight. If wall mounted keep 1.5m from the side walls and angle the speaker towards the listener area if possible; note that a corner position is the poorest sounding for any speaker even if it is the loudest. AE can supply damping plugs for the rear port to moderate the bass on request.

Downloaded from www.Manualslib.com manuals search engine

Positioning

Aegis Evo Three
Please unpack your AEGIS EVO THREE carefully on a carpet or similar surface. Locate the plinths and fittings and, having carefully inverted the speaker, screw the plinth to the base of the cabinet using the screws and pilot holes provided. Please ensure that you have firmly screwed the plinth to the cabinet, failure to do this will degrade performance.

There is a mass-loading compartment at the bottom of the cabinet.
You may choose to fill it with washed, fully dried non salt contaminated sand, or suitable metal chips, via the hole at the back. A plastic bung is provided to seal the cabinet. Mass loading will significantly improve the performance of the speaker. If you decide not to mass-load the speakers, we still recommend fitting the plastic bung to avoid unwanted resonance. Be aware that the plastic bung has not been designed to be removable after insertion. You may wish to use a temporary removable plug until you have made your decision

High tensile 8mm floor spikes and lock nuts are provided for use with the plinth. This guarantees optimum coupling to the floor particularly in rooms fitted with carpet. The spikes penetrate the carpet and couple the speaker firmly to the floor structure below. The spikes (with lock nut screwed down to the knurled part of the spike) should be fitted to the threaded insert in the underside of the plinth while the speaker is still inverted. The speaker is now ready for installation.. Any final adjustment of spikes to eliminate cabinet wobble can now be made using a spirit level if required. The lock nuts should be firmly tightened when the final adjustments to cabinet position and alignment have been made and there is no rocking.

Closeness to room boundaries has a major impact on the low frequency performance. The speakers should be kept away from corners (which will produce bass booming) and they should be 0.6 m from the back walls, and a greater distance e.g. 1m from the side walls.

Aegis Evo Centre
Position the AEGIS EVO CENTRE either immediately above or below the television screen, whichever places the speaker nearest ear level when listening. Line the front of the speaker approximately in line with the plane of the screen.

Fix the four self-adhesive foam-rubber feet to the base of the speaker to protect both the surface on which the speaker stands and the underside of the speaker. The feet also absorb vibration, which is especially important if placing the speaker directly onto a thin television cabinet. If placement is on top of the television, be aware that the flat surface depth may be limited, so ensure the feet are placed accordingly.

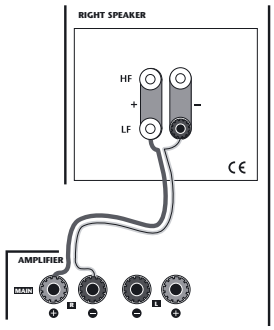
When fine-tuning the Aegis EVO system, adjust the levels of the left, centre and right channel speakers to give an even movement as sound images pan across the screen. Most Home Theatre systems also include calibration sounds to help set the right balance for the three front channels. The EVO Centre may also be used as high powered surround channel speakers, mounted vertically, since their particular 'vocal precision' tuning also suits them for boundary placement on a wall.

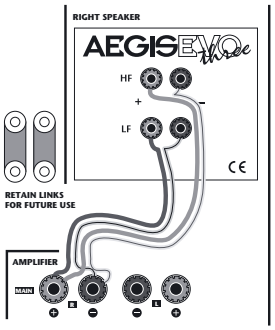
Check that your amplifier is switched off before installing your loudspeakers. Failure to do so may result in speaker or amplifier damage if the amplifier is energised and delivering any power. The diagrams illustrate the connection for one loudspeaker only.

Downloaded from www.Manualslib.com manuals search engine

Connections

Conventional [or single wire] connection
Normal passive wiring requires the supplied shorting links to be in place between the high and low frequency sections. The positive (ribbed) cable from the amplifier positive (or red) terminal should connect with the positive (red) terminal on the loudspeaker. Similarly the negative (smooth) cable should connect the amplifier negative terminal (black) to the negative terminal (black) on the loudspeaker.





Bi-Wiring
Bi-wiring separates the bass and treble paths and generally offers sound quality advantages particularly with moderate cost cable. An extra set or alternatively bi- wire type of cable is required. Important Note; to be effective, the shorting links must be removed for the connection between the high and low frequency sections on the back of the speaker and should be stored for possible, later single wire use.

The two pairs of cables are connected in parallel to the amplifier terminals. At the speaker, one cable of each pair should connect to the HF section and one

Connections

to the LF section. Note that two cable terminations are connected to each terminal of the amplifier, which may seem surprising for the inexperienced user. As usual the positive (ribbed) cables from the amplifier positive (or red) terminal should connect with the positive (red) terminals on the loudspeaker. Similarly the negative (smooth) cables in each pair should connect the amplifier negative terminal (black) to the negative terminals (black) on the loudspeaker. If these are not correct the sound may be degraded and the stereo image will be defocused.

Bi-Amping
Bi-amping adds a second, stereo power amplifier to the system. One stereo amplifier drives the high frequency section of both loudspeakers; the second drives the low frequency sections. Follow the amplifier instructions for joining the low level signal connections

Safety Note: For bi-amping the shorting links *must* be removed. Failure to do so will likely result in damage to your amplifiers.

Connection for bi-amping is achieved in much the same way as bi-wiring. The terminal (red, positive) of the chosen treble or high frequency amplifier should be connected via the ribbed and /or colour coded cable to the positive (red) HF terminal on the speaker. Similarly, the treble amplifier negative terminal is connected to the negative (black) HF terminal on the speaker via the cable. Repeat this process with the bass amplifier and LF terminal pair..

After wiring up; begin at very low volume, switch on the amplifier, select a working signal source and then raise the volume to a moderate listening level, checking that all the drivers in both speakers are working , that there is no roughness or distortion, and that when the channel balance control is panned from left to right the sound image moves correctly with the control action. If all is ok then select your chosen volume and enjoy the often remarkable advance in sound quality and clarity which results from Bi-Amping .

Downloaded from www.Manualslib.com manuals search engine

Specifications

Treble Unit: 25 mm silk fabric dome. Anti-reflection pole. Ferro fluid cooled and damped. Magnetically shielded. Metal chassis

Mid/Bass Unit: 120 mm pressed-steel chassis. Pressed alloy cone with 32mm thermally bonded voice coil. High-power long-throw magnet system. Magnetically shielded.

Bass Unit: 160 mm die-cast chassis. Alloy cone, with 25 mm coil, high power, long throw magnet system. Magnetically shielded. [Aegis EVO Three]

Cabinet: 15mm MDF enclosure. Low diffraction front baffle. High-power, gas-flowed, low-turbulence bass reflex porting.

Terminals: Gold-plated, bi-wire , binding posts.

	Aegis Evo One	Aegis Evo Three	Aegis Evo Centre
Treble Unit	1	1	1
Mid/Bass Unit	1	1	1
Bass Unit	0	1	1
Power Handling	100 Watt max.	150 Watt max.	150 Watt max.
Crossover	3.3kHz 3rd order	3.5kHz 3rd, 330Hz 2nd order	3.1kHz 3rd, 275Hz 2nd order
Frequency response ± 3dB	50Hz – 20kHz	40Hz – 20kHz	60Hz – 20kHz
Frequency response - 6dB	38Hz – 22kHz	36Hz – 22kHz	50Hz – 22kHz
Sensitivity	89dB / 1W / 1M	90.5dB / 1W / 1M	91.5dB / 1W / 1M
Impedance	8 Ohm	8 Ohm	8 Ohm
Cabinet	25mm front baffle Full internal bracing	25mm front baffle Full internal bracing Double enclosure	21mm front baffle Lateral wave absorber
Weight (excl. packaging)	7kg each	16kg each	7kg
Dimensions (WxHxD)	192 x 362 x 235 mm	192 x 880 x 220 mm	460 x 172 x 192 mm

Warranty

Your Acoustic Energy loudspeakers are guaranteed against original defects in materials, manufacture and workmanship for 3 years from the date of purchase. Please retain all original packaging materials for possible future use. We suggest that you complete details of purchase now and keep this information in a safe place for future reference.

Under this warranty Acoustic Energy agrees to repair any defect or, at the company's discretion, replace the faulty component(s) without charge for parts and labour. This warranty does not imply any acceptance by Acoustic Energy or its agents for consequential loss or damage and specifically excludes fair wear and tear, accident, misuse or unauthorised modification.

This warranty is applicable in the United Kingdom only and does not in any way limit the customer's legal rights. Claims and enquiries under the warranty for AE products purchased outside the UK should be addressed to the local importers or distributors.

If you have reason to claim under the warranty please contact your dealer in the first instance.

AE
ACOUSTIC ENERGY

Downloaded from www.Manualslib.com manuals search engine